

CLAIMS

1. Glazing assembly, comprising in succession:

5 - a first rigid substrate (S1);
- a second rigid substrate (S2);
- at least one active system (3) comprising a multilayer, comprising
at least one thin film and placed between the substrates (S1 and S2); and
- at least one polymer film (f1) having the function of retaining
10 fragments of the glazing assembly should it break, the said film being
placed between the substrate (S1) and the substrate (S2);
characterized in that the active system (3) is on the inner face (2) of the
substrate (S1).

2. Glazing assembly according to Claim 1, characterized in that the
15 active system is an electrically controllable system having variable
optical and/or energy properties, of the electrochromic system, optical
valve, viologen-based system, liquid-crystal system or electroluminescent
system type.

3. Glazing assembly according to Claim 1, characterized in that the
20 active system is a thin film or a thin-film multilayer with a thermal
function, of the low-emissivity or solar-protection type, an acoustic
function, of the acoustic attenuation coating type, or an optical function,
of the decorative or absorbent, thermochromic or thermotropic type.

4. Glazing assembly according to one of the preceding claims,
25 characterized in that the substrates (S1) and (S2) are made of glass.

5. Glazing assembly according to one of the preceding claims,
characterized in that the total thickness (e_{1+2}) of the substrates (S1) and
(S2) and of all the materials that can be placed between them is less than
30 or equal to 8 mm, especially less than or equal to 5.5 mm, preferably
between 2 mm and 5 mm.

6. Glazing assembly according to one of Claims 1 to 4,
characterized in that the total thickness (e_{1+2}) of the substrates (S1) and
(S2) and of all the materials that can be placed between them is less than
or equal to 30 mm, preferably between 6 mm and 25 mm.

7. Glazing assembly according to one of the preceding claims, characterized in that the substrates (S1) and (S2) have substantially identical shapes and substantially identical dimensions.

8. Glazing assembly according to one of Claims 1 to 6, 5 characterized in that the substrates (S1) and (S2) have different dimensions and substantially identical shapes.

9. Glazing assembly according to one of the preceding claims, characterized in that it is provided with an opacifying peripheral coating, of the screen-printed type, especially around the periphery of face (2) on 10 the substrate (S1) and/or around the periphery of face (3) or face (4) on the substrate (S2), especially at enamelled areas or at electroconductive areas.

10. Glazing assembly according to one of the preceding claims, characterized in that it is provided with at least one margining line 15 positioned on the periphery of the face (2) located on the substrate (S1) and/or on the periphery of the face (3) located on the substrate (S2).

11. Glazing assembly according to one of the preceding claims, characterized in that it is provided with at least a first peripheral seal in contact with the facing faces of the substrates.

20 12. Glazing assembly according to one of the preceding claims, characterized in that it is provided with at least a second peripheral seal in contact with the edges of the substrates.

25 13. Glazing assembly according to either of Claims 11 and 12, characterized in that the first and/or second peripheral seal(s) is (are) attached or obtained by extrusion or obtained by encapsulation.

14. Glazing assembly according to either of Claims 12 and 13, characterized in that the second peripheral seal, or at least one of them if there are more than one, is flush with the outer face of the first substrate.

30 15. Glazing assembly according to one of Claims 10 to 14, characterized in that the first and/or second peripheral seal, or at least one of them if there are more than two seals, at least partly fills an open peripheral groove defined by a recess between the two substrates.

16. Glazing assembly according to one of Claims 10 to 15,

characterized in that the first and/or second peripheral seal is penetrated by connection elements of the active system and/or at least partly contains mechanical reinforcement elements.

17. Glazing assembly according to one of the preceding claims,
5 characterized in that it is a window for the motor vehicle industry,
especially a sunroof, or a window for buildings, especially a roof window
or skylight.

18. Glazing assembly according to one of the preceding claims,
characterized in that it passes the safety tests of the ECE R43 and ANSI
10 Z26.1. standards.

19. Glazing assembly according to any one of Claims 1 to 18,
characterized in that it is a graphical and/or alphanumeric data display
panel, a window for buildings, a rear view mirror, an aircraft windscreens
or cabin window, or a roof window.

20. Glazing assembly according to any one of the claims,
characterized in that it is:

- an interior or exterior window for buildings;
- a shop showcase or countertop display case, which may be curved;
- 20 - glazing for protecting an object of the painting type;
- reinforced glazing
- an antiglare computer screen;
- glass furniture.

21. Glazing assembly according to one of the preceding claims,
25 characterized in that it comprises at least one transparent, flat or
curved, clear or bulk-tinted substrate of polygonal shape or at least
partly curved.

22. Glazing assembly according to one of the preceding claims,
characterized in that it includes an opaque, opacified or mirror substrate.

30 23. Motor vehicle, characterized in that it is equipped with glazing
assembly according to one of the preceding claims, possibly a sunroof and
preferably flush with the body.